

## NEW AUSTRALIAN LEPIDOPTERA.

BY OSWALD B. LOWER, F.E.S.

## GEOMETRIDÆ.

EUCHLORIS (Iodis) HYPOLEUCUS, n.sp.

♀. 42 mm. Head reddish-fuscous, lower half of face fleshy-white. Antennæ pale ochreous, fillet white, thorax and abdomen green, abdomen silvery-white beneath and towards anal segments above. Legs pale ochreous-whitish, posterior pair whitish, palpi porrected, terminal joint as long as second, pale fuscous, beneath whitish. Forewings elongate-triangular, costa arched, strongly at base, apex round-pointed, hindmargin oblique, hardly straight; bright grass-green; a broad whitish costal streak from near base to apex, becoming suddenly finely attenuated from middle to apex; a faint, slightly waved, whitish line, from beneath costa at  $\frac{1}{4}$  to  $\frac{1}{3}$  inner margin; a similar line from beneath costa at  $\frac{2}{3}$  to  $\frac{2}{3}$  inner margin, slightly curved outwards; a small reddish-ferruginous discal spot at  $\frac{1}{3}$  above middle; a fine ferruginous hindmarginal line: cilia white, becoming ferruginous on terminal half. Hindwings with hindmargin slightly crenulate, more prominent in middle; an elongate reddish discal spot; second line as in forewings; hindmarginal line and cilia as in forewings. Underside of wings shining silvery-white.

North Queensland; one specimen (Coll. Lyell).

Between *byrsopa*, Meyr., and *megaloptera*, Lower; differing from the former by ground colour and absence of strigulation, and from the latter by the absence of lines and shape of wings.

## MONOCTENIADÆ.

MONOCTENIA POLYSPILA, n.sp.

♂. 40 mm. Head ochreous-brown, antennæ ochreous, pectinations ochreous, apical half simple. Legs whitish. Thorax pale

greyish-ochreous, anterior half ochreous-brown, separation edged by a curved line of purplish-fuscous. [Abdomen broken.] Palpi whitish-ochreous, terminal joint fuscous except apex. Forewings elongate-triangular, costa straight, apex produced, hindmargin sinuate beneath apex, thence bowed, crenulate; pale ochreous-brown; markings whitish, edged with dull purplish-fuscous; 4 or 5 small whitish spots on costa between base and  $\frac{1}{6}$ , more or less edged beneath by several small purplish spots; a moderate costal spot at  $\frac{1}{3}$ , from which proceeds a row of smaller similar spots to inner margin at  $\frac{1}{3}$ ; a larger somewhat triangular costal spot at about  $\frac{2}{3}$ , from which proceeds a dull purplish-fuscous band ending on inner margin at about  $\frac{2}{3}$  in a similar spot, fascia narrowed beneath costa; a round costal spot just before apex, from which proceeds two rows of parallel spots, indicating subterminal and submarginal, ending at anal angle, middle spots much smaller than those on margins; a small purplish-fuscous spot at apex: cilia ochreous-brown, somewhat darker on basal half. Hindwings with the hindmargin slightly crenulate; colour and markings as in forewings, but median fascia somewhat thicker, and basal spots hardly perceptible. hairs of inner margin white. Wings beneath pale greenish-yellow, markings of upperside reproduced; a large roundish purplish spot near anal angle; an irregular spot of purplish-fuscous on costa of hindwings before apex; cilia dark purplish-fuscous becoming orange-tinted on parts and whitish on terminal third.

North Queensland; one specimen (Coll. Lyell).

#### SELIDOSEMIDÆ.

##### IDIODES (?) PYRRHOPA, n.sp.

♀. 28 mm. Head scarlet, antennæ, legs and palpi orange-yellow, tibiæ and tarsi banded with black, posterior legs paler. Thorax and abdomen deep coppery-fuscous, collar broadly pale yellow. Forewings elongate-triangular, costa straight, apex pointed, hindmargin strongly bowed in middle, sinuate beneath apex; deep coppery-fuscous; a broad yellow costal streak from base to apex, attenuated posteriorly, containing 3 or 4 irregular

fuscous spots on lower edge; veins in disc outlined with fiery red; a row of very obscure dark fuscous spots from beneath costal streak at  $\frac{3}{4}$  to before<sup>4</sup> anal angle; a dark fuscous hindmarginal line: cilia reddish-orange. Hindwings with hindmargin rounded; dark coppery-fuscous; cilia as in forewings. Wings beneath bright orange-yellow, forewings with a fuscous dot at end of cell, submarginal spots reproduced; a broad fuscous hindmarginal band, hindwings with a fuscous dot in middle and a broad fuscous hindmarginal band.

Waverley, near Sydney, N.S.W.; one specimen in April (Coll. Lyell).

I know of no Australian species of *Geometra* approaching this species in appearance; in shape of wing and markings it is not unlike one of the genus *Erosia* (*Noctuina*); but as it approaches *Idiodes* closely I place it there for the present.

#### STIBAROMA HEMADELPHIA, n.sp.

♂. 38 mm. Head, palpi and thorax dark ashy-grey, thorax with anterior and median black transverse lines, interrupted by crest, posterior crests black above. Legs blackish, tibiae and tarsi banded with white, antennae greyish-ochreous, pectinations 3 at greatest length, apex simple; abdomen grey, anal tuft ochreous. Forewings elongate-triangular, hindmargin waved, somewhat bowed; dark ashy-grey-whitish; 3 moderate black lines; 1st from  $\frac{1}{5}$  costa to  $\frac{1}{4}$  inner margin, almost acutely angulated outwards above middle; 2nd slightly thicker (indicating median shade), almost parallel to first, excepting on lower half, where it diverges and ends on inner margin just before middle; 3rd from just beyond middle of costa obliquely outwards to above middle of wing, thence with a very strong sinuation inwards to middle of inner margin, with a slight projection outwards just above inner margin, faintly edged with whitish throughout; a strongly dentate white subterminal line, rather indistinctly traceable on lower third, anteriorly faintly edged with ochreous-brown; interspace streaked with fine black lines; a fine black

hindmarginal line: cilia ashy-grey, with a darker median line. Hindwings with the hindmargin unevenly waved, with a slight projection at anal angle; whitish; a blackish discal dot above middle, hindmarginal area suffused with fuscous, more pronounced at apex; a suffused, hardly traceable, waved hindmarginal line parallel to hindmargin; hindmarginal line as in forewings; cilia grey.

♀. (?) 32 mm. Differs only in position of third line of forewings, which is from before  $\frac{3}{4}$  of costa to  $\frac{2}{3}$  inner margin, and is gently curved inwards on lower  $\frac{1}{2}$  and without any projection. The ochreous diffusion is absent as is the subterminal line.

This is a perplexing insect to locate correctly. It hardly agrees with the characters of *Stibaroma* on account of the antennae and bifid posterior crests, a character only shared by *Paralava*; but the palpi, which are very short, would remove it from that genus. It would appear to have some resemblance to *Gastrina*, but the absence of dilated femora is inconsistent with that genus. I am not certain that the insect described as the ♀ is not a distinct species; the balance of evidence appears to be in favour of its being so. A similar peculiarity in regard to the lines occurs in *melanotoxa*, Meyr.

Broken Hill, N.S.W.; the female in April, the male in June.

#### ÆCOPHORIDÆ.

##### EUCHÆTIS SARCOPTERA, n.sp.

♂. 25 mm. Head, palpi and thorax fleshy-ochreous, second joint of palpi internally whitish. Ciliations  $3\frac{1}{2}$ . Abdomen fuscous, strongly margined laterally with grey-whitish, four posterior segments somewhat lighter. Legs dark fuscous, tibiæ and tarsi irregularly ringed with whitish. Forewings moderate, hardly dilated, costa strongly arched towards base, hindmargin oblique; fleshy-ochreous, minutely dusted throughout with dark fuscous; costal edge light flesh from near base to apex, 3 irregular indistinct black dots, one near base, one immediately above and one below slightly larger; 2 distinct black dots at end of cell, one

above the other, a slightly curved row of 3 small obscure black dots before hindmargin in middle; a row of well-defined black dots along costa, and hindmargin to anal angle, commencing from just above dots at end of cell; cilia fleshy-ochreous, terminal half grey-whitish, separation effected by a line of fuscous. Hindwings greyish-fuscous, becoming lighter towards base; cilia grey-whitish, a fuscous median line round apex.

Mt. Macedon, Victoria; one specimen bred from piece of rolled bark of *Eucalyptus* sp., in March.

Recalls typical species of *Hoplitica* and *Heliocausta* in form of wing and markings.

*HOPLITICA MELLICHOEA*, n.sp.

♂. 22 mm. Head, thorax, antennæ, palpi and legs pale yellow, face lighter, posterior legs ochreous-whitish, collar fuscous-tinged, abdomen ochreous-grey. Forewings elongate, moderate, costa rather strongly arched, hindmargin very slightly sinuate beneath apex, thence oblique, 7 to immediately below apex; pale yellow; costal edge paler, a pale reddish-fuscous dot in disc at  $\frac{1}{2}$  above middle; a second obliquely below and beyond, a third at end of cell in a line with first; an obscure row of reddish-fuscous dots along costal fourth and hindmarginal edge, continued to anal angle; cilia pale yellow. Hindwings and cilia pale yellow-whitish.

Mt. Macedon, Victoria; one specimen in February. Nearest *neochlora*, Meyr.

*PHILOBOTA CYCLOGRAMMA*, n.sp.

♀. 20 mm. Head and palpi ochreous-white, basal half of second joint of palpi blackish externally, antennæ black, annulated with white. Legs ochreous-yellow, anterior and middle tibia banded with black, thorax blackish-fuscous, patagia ochreous-white. Abdomen ochreous-fuscous, anal tuft orange. Forewings elongate, moderate, costa gently arched, hindmargin obliquely rounded; ochreous-whitish, with blackish fuscous markings, more or less margined with yellowish-orange; a thick outwards curved

fascia from base of costa to inner margin at  $\frac{1}{4}$ , emitting a tooth posteriorly which reaches  $\frac{3}{4}$  across wing; a suffused spot on costa immediately above tooth, separated by ground colour; a thick irregular, outwardly oblique fascia from costa at  $\frac{2}{3}$  to  $\frac{2}{3}$  across wing; a similar, inwardly oblique fascia, dilated on costa, from costa at apex meeting termination of previous fascia, and emitting a slightly curved tooth before anal angle; cilia ochreous, strongly suffused with blackish and with an orange tooth just below apex and at anal angle. Hindwings dark bronzy-fuscous; cilia fuscous tinged with yellowish.

Gisborne, Victoria; one specimen in February (Coll. Lyell).

In form of wing and markings it recalls both *ophiodes*, Meyr., and *signophora*, Meyr.

#### PHILOBOTA ANARRECTA, Meyr.

I have received a specimen of this species taken by Mr. G. Lyell, Junr., at Gisborne, Victoria, which presents some abnormal peculiarities by the curious structure of veins 4 and 5 of the forewings, which are each curved so as to anastomose at half their length, thus forming a small second cell; they then diverge and terminate as usual on hindmargin; the neuration is otherwise normal. The ochreous-yellow curved fascia from middle of third streak is very strongly infuscated.

#### CÆSYRA HEMIDESMA, n.sp.

♀. 18 mm. Head yellow, palpi yellow, terminal joint fuscous; thorax, abdomen, antennæ and legs dark bronzy-fuscous, posterior legs yellow. Forewings elongate, moderate, costa gently arched, apex round-pointed, hindmargin obliquely rounded; pale yellow, with dark bronzy-fuscous markings; a broad straight fascia from beyond middle of costa to beyond middle of inner margin, dilated on inner margin and touching hindmarginal patch; a hindmarginal patch, anterior edge hardly curved, paler and becoming yellowish anteriorly; cilia bronzy-fuscous. Hindwings and cilia dark bronzy-fuscous.

Gisborne, Victoria; one specimen in November (Coll. Lyell).

Not unlike a miniature *Philobota fuscialis*, Fabr., but without the basal fascia.

ATHEROPLA CREMNOPELTA, n.sp.

♂. 18 mm. Head, palpi and thorax pale ochreous, second joint of palpi externally fuscous except apex, terminal joint as long as second. Legs ochreous-fuscous, suffusedly banded with white. Abdomen greyish-ochreous, anal tuft paler. Antennæ fuscous. Forewings elongate, moderate, costa gently arched, apex round-pointed, hindmargin hardly sinuate beneath apex, oblique; pale clear ochreous, markings blackish; a minute dot before  $\frac{1}{3}$  of disc, and a second slightly beyond and beneath; a well-marked dot at end of cell; a row of well-defined spots along costa, continued right round hindmargin to anal angle, commencing immediately above dot at end of cell; a large quadrate spot just before anal angle: cilia ochreous, becoming darker on basal half. Hindwings pale grey; cilia as in forewings.

Hamilton, Victoria; one specimen in December.

Distinct from the other described species by the large anal spot.

CECOPHORA HYPOXANTHA, n.sp.

♀. 24 mm. Head, palpi and thorax deep reddish-fuscous, palpi very long, second joint suffusedly irrorated with white. Legs ochreous-whitish, posterior and middle pair yellowish-tinged. Forewings elongate, rather broad, slightly dilated, costa rather strongly arched on basal half, apex rounded, hindmargin obliquely rounded, 7 and 8 stalked, 7 to costa; deep reddish; extreme costal edge from near base to about  $\frac{3}{4}$  pale yellowish; a blackish dot in disc at  $\frac{1}{3}$ , a second immediately below, and a third larger at  $\frac{2}{3}$ ; a very ill-defined row of hindmarginal dots: cilia deep reddish. Hindwings bright yellow; a fuscous hindmarginal band, broadest at apex and along inner margin, almost obsolete in middle of hindmargin; cilia blackish.

Broken Hill, N.S.W.; one specimen in November.

A doubtful species; the palpi would seemingly require a new genus.

## MACROBATHRA PLATYCHROA, n.sp.

♂. 15 mm. Head, palpi and thorax ochreous-yellow, thorax anteriorly black, basal portion of head black, terminal joint of palpi fuscous-tinged. Antennæ fuscous, annulated with white. Legs ochreous-whitish, banded with black. Abdomen fuscous, sides ochreous-whitish. Forewings elongate-lanceolate; black, with ochreous-yellow markings; a broad direct fascia from  $\frac{1}{4}$  of costa to  $\frac{1}{4}$  of inner margin, anterior edge straight, posterior edge slightly waved; a similar direct fascia from beyond middle of costa to beyond middle of inner margin, anterior edge with a short projecting tooth of ground colour in middle, posterior edge slightly waved; an irregular roundish spot on costa at apex, and a small spot at anal angle: cilia blackish. Hindwings and cilia blackish.

Gisborne, Victoria; exceptionally distinct; one specimen in January (Coll. Lyell).

## XYLORYCTIDÆ.

## XYLORYCTA CHRYSOMELA, n.sp.

♀. 32 mm. Head ochreous-yellow, palpi orange, terminal joint ochreous. Thorax yellowish-white, anterior half fuscous, collar orange-reddish. Abdomen orange; antennæ fuscous, annulated with white. Legs orange, tarsi banded with fuscous. Forewings elongate, somewhat dilated, costa gently arched, hindmargin oblique; 2 from  $\frac{2}{3}$ ; 7 to hindmargin; whitish-ochreous, with dark fuscous markings; a broad oblique fascia close to base, dilated on inner margin; a moderate triangular spot on costa just beyond; a second moderate somewhat irregularly edged fascia from about middle of costa to middle of inner margin, broadly dilated beneath, costal portion connected with triangular spot by a thick streak which is continued along costa to  $\frac{3}{4}$ , and encloses one or two small spots of ground colour on costa; a third moderately thick curved fascia from posterior edge of this streak, ending just above inner margin on posterior edge of previous fascia; a thick streak from middle of posterior edge of third fascia to just below



apex, thence continued as a thick streak along hindmargin to anal angle; a small spot on costa at  $\frac{4}{5}$ ; a triangular spot of fuscous in cilia at apex, containing 2 sharp black lines at base: cilia whitish-ochreous, basal half below fuscous spot orange, separation well-defined; a fuscous spot in cilia at anal angle. Hindwings orange, with an irregular fuscous band from just below costa at  $\frac{3}{4}$  to anal angle, contracted posteriorly: cilia yellow, basal half orange.

North Queensland; one specimen (Coll. Lyell).

Between *ophiogramma*, Meyr., and *porphyrinella*, Walk.

#### SCIEROPEPLA ARGOLOMA, n.sp.

♀. 30 mm. Head, palpi, antennæ, thorax and abdomen fuscous, terminal joint of palpi  $\frac{3}{4}$  of second, second joint sharply white on basal half beneath, basal joint of palpi white beneath. Legs white, tibiæ and tarsi infuscated, posterior legs ochreous-fuscous. Abdomen with greyish segmental rings. Forewings elongate, moderate, costa gently arched, apex round-pointed, hindmargin oblique, 7 and 8 stalked, 7 to costa; dark fuscous, suffusedly mixed with grey-whitish, lighter in disc; a moderate snow-white costal streak from very near base to  $\frac{3}{4}$ , attenuated at extremities; veins towards hindmargin suffusedly outlined with fuscous: cilia fuscous, with a darker line at base. Hindwings dark fuscous; cilia as in forewings.

Victoria; one specimen (Coll. Kershaw).

Rather an abnormal looking species, but undoubtedly rightly referred.

#### GELECHIADÆ.

#### PALTODORA (?) THERMÆA, n.sp.

♂. 20 mm. Head, palpi, antennæ and thorax ochreous-orange, second joint of palpi densely tufted, slightly fuscous-tinged beneath, terminal joint erect, apex acute, antennæ  $\frac{3}{4}$  of wing. Abdomen yellowish. Forewings elongate, rather narrow, costa straight, apex rounded, hindmargin obliquely rounded; orange-yellow, deeper on margins, 7 and 8 to costa, stalked; a fine line of

fuscous at apex: cilia orange. Hindwings with hindmargin strongly sinuate beneath apex, apex produced; 3 and 4 from a point, 5 bent over to 4, 6 and 7 separate; black; cilia  $1\frac{1}{4}$ , blackish, costal cilia yellowish.

Sydney, N.S.W.; one specimen in October (Coll. Lyell).

GELECHIA (?) ISOSCELIXANTHA, n.sp.

♀. 10 mm. Head, thorax and abdomen black, face ochreous, palpi long, terminal joint as long as second, strongly recurved, whitish-ochreous, terminal joint externally fuscous, second joint smooth, abdomen beneath whitish-ochreous. Legs whitish-ochreous, tibiae infuscated above. Antennae fuscous,  $\frac{3}{4}$  of wing. Forewings moderate, rather narrow, costa gently arched, apex pointed; black, with a yellow triangular spot on costa at  $\frac{5}{6}$ , reaching nearly  $\frac{1}{3}$  across wing: cilia greyish, with 3 or 4 irregular lines of blackish round apical portion. Hindwings with hindmargin strongly subsinuate, produced, 3 and 4 approximated at base, 6 and 7 long-stalked; cilia 3, greyish-fuscous.

Broken Hill, N.S.W.: one specimen in middle of April.

Appears to approach the European genus *Ptochenusa*, Hein., in structure, and is not unlike *G. simplicella*, Walk.

PSORICOPTERA MELANOPTILA, n.sp.

♂-♀. 10 mm. Head and thorax dull whitish, thorax fuscous anteriorly, patagia white, palpi moderately long, fuscous; second joint internally whitish, apex of second joint with a broad whitish ring, terminal joint  $\frac{3}{4}$  of second, apex white; antennae fuscous, obscurely annulated with white,  $\frac{3}{4}$  length of wing; abdomen greyish, becoming ochreous on median third. Legs fuscous. Forewings moderate, elongate, costa gently arched, apex pointed, hindmargin oblique, veins 1 furcate, 3 and 4 closely approximated at base, 7 and 8 stalked, 7 to costa; whitish tinged with ashy-grey, and with some ferruginous scales; 3 black tufts of scales, first in disc about middle, second just below, and third on anal angle, the latter one edged more or less with ferruginous; an

obscure blackish streak at base, obscurely continued along costa to next fascia; a moderate irregular obscure blackish fascia from costa at  $\frac{1}{4}$  to first two tufts; a suffused blackish elongate mark along costa at about  $\frac{3}{4}$ , followed by an obscure blackish row of dots, which are continued round hindmargin to anal angle; cilia grey-whitish, with a few black and ferruginous points. Hindwings with hindmargin subsinuate; veins 3 and 4 approximated at base, 6 and 7 from a point, grey; cilia  $1\frac{1}{2}$ , grey.

Broken Hill, N.S.W.; several specimens beaten from *Solanum esuriale* in March and April.

The palpi of the present species hardly agree with the characters of *Psoricoptera*.

COPIDOSTOLA (?) ORTHOTIS, n.sp.

♀. 25 mm. Head, thorax and palpi pale fleshy-white, patagia dark fuscous, palpi strongly tufted, terminal joint short, erect, apex acute, apical half of terminal joint dark fuscous, second joint beneath black. Legs dark fuscous, posterior pair greyish, hairs of posterior pair long, greyish-ochreous. Abdomen greyish. Forewings elongate, moderate, apex pointed, hindmargin extremely oblique; 7 and 8 stalked, 7 to costa, 3 and 4 separate, 2 from before angle of cell; pale fleshy-white; a straight thick black streak from base to apex, attenuated posteriorly, well defined above, somewhat suffused beneath, suffusion becoming broader towards hindmargin and anal angle, where it has a tendency to become paler and outline the veins; a few fuscous lines along veins towards costa, hardly perceptible; cilia grey, with a pale fuscous basal line. Hindwings with hindmargin sinuate beneath apex; 3 and 4 separate, 5 bent over to 5, 6 and 7 nearly parallel; grey; cilia as in forewings.

Sydney, N.S.W.; one specimen (Coll. Lyell).

Recalls typical forms of the *Æcophoridae* (especially *Leptocroca sanguinolenta*, Meyr.), to which family I would have referred it, but the sinuate hindmargin of hindwings and absence of pecten seemingly refer it to the *Gelechiidae*.

## ELACHISTIDÆ.

## PTILOCHARES MELANOMA, n.sp.

♀. 22 mm. Head, palpi and thorax white, basal third of second joint fuscous, apex of terminal joint infuscated. Antennæ fuscous, annulated with white. Abdomen greyish-ochreous. Legs fuscous, irrorated with whitish, posterior pair with long grey-whitish hairs, banded with black. Forewings elongate-lanceolate, white, a thick very oblique blackish fascia at base; a paler and less distinct oblique fascia from  $\frac{1}{3}$  of costa to beyond middle of inner margin; a similar fascia from costa at  $\frac{3}{4}$  to before anal angle, the two last-mentioned fasciæ are connected by a black longitudinal streak in middle; a black elongate streak to apex, in a direct line with previous streak, and joining it by a very fine blackish line: cilia fuscous-whitish, with 2 fuscous basal teeth below apex and at anal angle, becoming white on terminal half on upper half of hindmargin. Hindwings narrower than forewings, lanceolate; fuscous; cilia  $3\frac{1}{2}$ , greyish-fuscous, without the fuscous teeth.

Stawell, Victoria; one specimen.

Recalls species of *Oxythecta* (*Ecophoridae*).